

**Municipality/Organization:** Town of Needham

**EPA NPDES Permit Number:** \_\_\_\_\_

**MaDEP Transmittal Number:** W-041019

**Annual Report Number**

**& Reporting Period:** No. 3: May 05 - May 06

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## **NPDES PII Small MS4 General Permit Annual Report**

### **Part I. General Information**

**Contact Person:** Richard P. Merson

**Title:** Director, Dept. of Public Works

**Telephone #:** 781-455-7534

**Email:** RMerson@town.needham.ma.us

### **Certification:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Signature:** Richard P. Merson

**Printed Name:** Richard P. Merson

**Title:** Director of Public Works

**Date:** June 27, 2006

## Part II. Self-Assessment

The Town of Needham has completed the required self-assessment and has determined that our municipality is in compliance with all proposed permit applications Permit Year 3 goals except as noted in Part III of this report.

## Part III. Summary of Minimum Control Measures

### 1. Public Education and Outreach

| <b>BMP ID #</b> | <b>BMP Description</b>                            | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>   | <b>Progress on Goal(s) – Permit Year 3</b><br>(Reliance on non-municipal partners indicated, if any)  | <b>Planned Activities – Permit Year 4</b>   |
|-----------------|---|--------------------------------------|---|---|---|
| 1-1             | Classroom education on Storm Water                | DPW Director                         | Teachers instruct classes and present materials from DPW; Volunteer outreach to youth groups and Public schools | Needham DPW in collaboration with the Needham Science Center will be hosting an auditorium presentation along with a “touch the trucks” display at local elementary schools starting May 10, 2006<br>Also, Mark Hollowell of the Needham DPW made a presentation on Storm water to a local Kindergarden class on 7/8/05 | Continue with auditorium presentations and Truck displays throughout the Needham School system. |
| 1-2             | Flyer and Brochure Distribution and Web Site Link | DPW Director                         | Gather and make available one flyer and two fact sheets, Distribute flyers to Needham Residents                 | Storm water survey developed and distributed to residents via water bills.  | Create link from Town web-site to CRWA  |

|         |                            |              |   |  |   |
|---------|----------------------------|--------------|---|--|---|
| 1-3     | Using the Media            | DPW Director | One local cable public service announcement, one yearly press release, and one annual storm water article | On 4/13/06 the article "Scrubbing Stormwater Clean" was published in The Needham Times. The local Board of Health distributed a "Septic System Maintenance Guide" to relevant residents. Local Cable has been supplied with the public service announcement "Protecting our communities from Stormwater pollutants" featuring Ted Danson | Continue to issue press releases in the local paper. Continue to have local cable air the PSA provided by American Oceans Campaign. |
| 1-4     | Hazardous Waste Management | DPW Director | Track amount of hazardous waste collected, continue to distribute educational materials                   | The Town of Needham continues to holds both Hazardous waste days yearly, and paint collection days multiple times per year. All amount information is provided in section five of the report.  | Continue to offer same program to the community.  |
| Revised |                            |              |   |  |   |

#### 1a. Additions

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## 2. Public Involvement and Participation

| BMP ID # | BMP Description         | Responsible Dept./Person Name | Measurable Goal(s)  | Progress on Goal(s) – Permit Year 3<br>(Reliance on non-municipal partners indicated, if any)   | Planned Activities – Permit Year 4  |
|----------|-------------------------|-------------------------------|---|---|---|
| 2-1      | Adopt-a-Stream Programs | DPW Director                  | Adopt two streams and track quantity of trash removed                       | One stream was adopted: Rosemary Meadow, by Northshore Development. (781-844-3186)  | Continue to clean and have cleaned adopted local water bodies.  |
| 2-2      | Stencil Storm Drains    | DPW Director                  | Stencil 50 storm drains per year  | The League of Women Voters are to provide volunteers to help stencil CBs. Members of the DPW to assist.   | Continue to have Town employees stencil storm drains, contact League of Women Voters and Boy Scouts to renew their participation. |
| 2-3      | Community Hotline       | DPW Director                  | Establish a hotline, track # of calls and problems / incidents remedied     | Hotline is direct number to the Needham Water & Sewer Division. Number is posted on traveling display used at Town Hall, Post Offices, and Schools etc. | Illegal Dumping reports are immediately inspected. Areas are noted and random checks ensue.                                       |
| 2-4      | Storm Water Committee   | DPW Director                  | Establish committee and hold annual meetings                                | Last meeting held on 3/20/06  | Continue to hold annual meetings and discuss current issues   |
| 2-5      | Pet Waste By-Law        | DPW Director                  | # of signs posted, # of educational materials, and # of dog licenses issued | Signs are posted at areas that are problematic with pet waste deposits. These signs will be replaced if they are destroyed or vandalized.               | Continue to Post signs where applicable.  |
| Revised  |                         |                               |   |   |   |

## 2a. Additions

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## 3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description                          | Responsible Dept./Person Name | Measurable Goal(s)  | Progress on Goal(s) – Permit Year 3<br>(Reliance on non-municipal partners indicated, if any)   | Planned Activities – Permit Year 4   |
|----------|--|-------------------------------|---|---|--|
| 3-1      | Outfall Testing Program                  | DPW Director                  | Follow-up testing for eight areas, perform study to verify need for TV inspections  | All follow-up testing was completed on 3/20/06 by Beta Group Inc. Awaiting results.   | Will analyze results when received and take appropriate measures for contamination if necessary. |
| 3-2      | Illegal Dumping Education                | DPW Director                  | # of education tools distributed, # of illegal dumps reported, # of penalties given to dumpers, # of meritorious acknowledgements to citizens | Flyers concerned with stormwater and other pollution elimination issues are inserted with the water bills that are mailed yearly.                                       | Continue established measurable goals.   |
| 3-3      | Septic System Controls (Board of Health) | DPW Director                  | Educate residents about Septic System, Continue procedures  | <ul style="list-style-type: none"> <li>• Board of Health Educational Flyer</li> <li>• 14 failed systems that are currently in the process of being restored.</li> </ul> | Continue current program   |
| Revised  |  |                               |   |   |  |

### 3a. Additions

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### 4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description                         | Responsible Dept./Person Name | Measurable Goal(s)   | Progress on Goal(s) – Permit Year 3<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4     |
|----------|---|-------------------------------|--|---|--|
| 4-1      | Policy and Procedure Review and Updates | Town Engineer                 | Revise existing policies and procedures, develop Storm Drain Connection Permit requirement                           | No action required in PY03  | Continue to implementation of policies |
| 4-2      | Construction Reviews                    | Town Engineer                 | Develop requirement to inspect sites, # of inadequate sites/plans reported by inspectors, # of non-compliant permits | Continue monitoring of site plans at the planning board level – No reported incidents in PY03 | Continue inspections                   |
| Revised  |   |                               |  |   |  |

### 4a. Additions

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## 5. Post-Construction Stormwater Management in New Development and Redevelopment

| BMP ID # | BMP Description                     | Responsible Dept./Person Name | Measurable Goal(s)   | Progress on Goal(s) – Permit Year 3<br>(Reliance on non-municipal partners indicated, if any)  | Planned Activities – Permit Year 4                      |
|----------|-------------------------------------|-------------------------------|--|--|---|
| 5-1      | Policy for Post Construction Runoff | Town Engineer                 | Develop town-wide policy for post-construction runoff control, a storm drain connection permit requirement, develop and implement standard construction details and policies | Continued implementation of Board of Selectmen / NPDES Policy, Standard Construction Specifications, Details and Policies  | Revise Standard Construction Specifications and Details |
| 5-2      | BMP Inspection and Maintenance      | Town Engineer                 | Inspect all Town maintained BMPs annually, document # of problems identified and remedied and changes in effluent  | Continued Inspection of BMPs<br>- DPW water quality swale<br>- Water Quality Tanks at Broad Meadow and Elliot Schools<br>- Detention Basins at RTS and Bridle Trail<br>-Infiltration Basin on Heath St. development. | Continue to inspect and document issues                 |
| Revised  |                                     |                               |  |  |   |
| Revised  |                                     |                               |  |  |   |

### 5a. Additions

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## 6. Pollution Prevention and Good Housekeeping in Municipal Operations

| <b>BMP ID #</b> | <b>BMP Description</b>                                 | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>   | <b>Progress on Goal(s) – Permit Year 3</b><br>(Reliance on non-municipal partners indicated, if any)  | <b>Planned Activities – Permit Year 4</b>                      |
|-----------------|--|--------------------------------------|---|---|--|
| 6-1             | Predictive Catch Basin Program                         | DPW Director                         | Develop, collect data, and refine program   | Catch Basin debris is excavated, trucked to the Recycling Transfer Station where it is weighed, analyzed and documented for location of area removed from.            | Monitor current catch basin program, Collect data in database. |
| 6-2             | Street Cleaning  | DPW Director                         | Sweep all streets annually years 1&2, sweep twice years 3-5, sweep all parking lots annually, | Spring and Fall street sweeping programs are in place and active. All parking lots also swept twice per year. Collected debris is documented and recorded at the RTS. | Continue current sweeping program.                             |
| 6-3             | Pipe Inspections                                       | DPW Director                         | Analyze 10% of drainage system/yr.  | Visual and camera inspection of drainpipe infrastructure is ongoing, 50,000 LF of drain have been examined.   | Analyze 10% (54,120Lf) of Drainage per year                    |
| 6-4             | Pipe Cleaning  | DPW Director                         | Clean 4,750' of drain pipe per year, jet flush 19,000' of drain pipe/yr.                      | 50,000 lf of drainpipe Cleaned and flushed.   | Continue to meet requirements                                  |
| 6-5             | New Pipe and Structure Installations                   | DPW Director                         | Replace 10 catch basins and 475' of drain pipe/yr.  | 200lf. Of various sized drain pipes replaced.<br>13 catchbasins replaced and/or repaired  | Unable continue to meet requirements                           |
| 6-6             | Investigate Town Owned BMPs for Retrofit Opportunities | DPW Director                         | Inspect 3 structural BMPs annually, implement two retrofit projects by year five              | New Infiltration Basin @ Rosemary Pool completed.<br>Lake Drive Drainage BMP Design Completed   | Lake Drive Drainage Construction Planned in PY04               |
| 6-7             | Integrated Pest Management                             | DPW Director                         | Continue established program in the future  | Continue established program in the future- PROGRAM SUBMITTED LAST YEAR   | Continue established program in the future                     |



**6a. Additions**

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**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>**

| <b>BMP ID #</b> | <b>BMP Description</b> | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b> | <b>Progress on Goal(s) – Permit Year 3<br/>(Reliance on non-municipal partners indicated, if any)</b> | <b>Planned Activities – Permit Year 4</b> |
|-----------------|------------------------|--------------------------------------|---------------------------|---|---|
| N/A             |                        |                                      |                           |   |   |
| Revised         |                        |                                      |                           |   |   |
| Revised         |                        |                                      |                           |   |   |
| Revised         |                        |                                      |                           |   |   |
| Revised         |                        |                                      |                           |   |   |
| Revised         |                        |                                      |                           |   |   |
| Revised         |                        |                                      |                           |   |   |

**7a. Additions**

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**7b. WLA Assessment**

**Part IV. Summary of Information Collected and Analyzed**

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

**Programmatic**

|  |       |                                    |
|--|-------|------------------------------------|
| Stormwater management position created/staffed | (y/n) | N/A                                |
| Annual program budget/expenditures             | (\$)  | Purchase of Service = \$155,000.00 |
|  |       | Expenses = \$32,125                |
|  |       | Salaries = \$139,557.00            |

**Education, Involvement, and Training**

|   |                      |   |
|---|----------------------|---|
| Estimated number of residents reached by education program(s)           | (# or %)             | 100%  |
| Stormwater management committee established                             | (y/n)                | Yes   |
| Stream teams established or supported                                   | (# or y/n)           | N/A   |
| Shoreline clean-up participation or quantity of shoreline miles cleaned | (y/n or mi.)         | N/A   |
| Household Hazardous Waste Collection Days                               |                      |   |
| ▪ days sponsored  | 1 Day                | Needham has sponsored 15 HHWC events since 1995 |
| ▪ community participation   | 1%                   |   |
| ▪ material collected  | 1.5 Tons             |   |
| Annual Paint Collections  | 17.35 Tons collected | Needham sponsors 7 paint collections annually   |
|   |                      |   |
| School curricula implemented  | (y/n)                |   |

### Legal/Regulatory

|  | In Place<br>Prior to<br>Phase II | Under<br>Review | Drafted | Adopted |
|--|----------------------------------|-----------------|---------|---------|
| Regulatory Mechanism Status (indicate with "X")    |                                  |                 |         |         |
| ▪ Illicit Discharge Detection & Elimination        |                                  |                 | X       |         |
| ▪ Erosion & Sediment Control                       | X                                |                 |         |         |
| ▪ Post-Development Stormwater Management           | X                                |                 |         |         |
| Accompanying Regulation Status (indicate with "X") |                                  |                 |         |         |
| ▪ Illicit Discharge Detection & Elimination        |                                  |                 | X       |         |
| ▪ Erosion & Sediment Control                       |                                  | X               |         |         |
| ▪ Post-Development Stormwater Management           |                                  | X               |         |         |

|               |             |                                       |
|---------------|-------------|---------------------------------------|
| ▪ Fertilizers | (lbs. or %) | Applications governed by soil testing |
| ▪ Herbicides  | (lbs. or %) | N/A                                   |
| ▪ Pesticides  | (lbs. or %) | N/A                                   |
|               |             |                                       |
|               |             |                                       |

|  |   |  |
|--|---|--|
| Anti-/De-Icing products and ratios                       | % NaCl<br>% CaCl <sub>2</sub><br>% MgCl <sub>2</sub><br>% CMA<br>% Kac<br>% KCl<br>% Sand | 2,829 Tons<br>0<br>3,699 Gal.<br>N/A<br>N/A<br>N/A<br>409 Tons |
| Pre-wetting techniques utilized                          | (y/n)   | Yes  |
| Manual control spreaders used                            | (y/n)   | No   |
| Automatic or Zero-velocity spreaders used                | (y/n)   | Yes  |
| Estimated net reduction in typical year salt application | (lbs. or %)   | 565 Tons   |
| Salt pile(s) covered in storage shed(s)                  | (y/n)   | Yes  |
| Storage shed(s) in design or under construction          | (y/n)   | No   |
|  |   |  |
|  |   |  |